

RECEIVED
CENTRAL FAX CENTER

SEP 19 2006

Application No. 10/775,979

Reply to Office Action

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Canceled)
2. (Currently Amended) A jet ink composition comprising methyl ethyl ketone and/or acetone as solvent, a rosin ester resin, a vinyl resin, and a colorant, ~~wherein the jet ink composition is free of an epoxy resin,~~ wherein said jet ink composition has (1) a viscosity from about 1.6 to about 10.0 centipoises at 25 °C; (2) an electrical resistivity from about 50 to about 2000 ohm-cm; and (3) a sonic velocity from about 1100 to about 1700 meters/second.
3. (Currently Amended) A jet ink composition comprising methyl ethyl ketone and/or acetone as solvent, a rosin ester resin, a vinyl resin, and a colorant, wherein the jet ink composition is free or substantially free of a cellulose nitrate resin and slow evaporating solvents ~~and is free of an epoxy resin,~~ wherein the slow evaporating solvents have an evaporation rate of less than about 0.5 where n-butyl acetate has an evaporation rate of 1.0, wherein said jet ink composition has (1) a viscosity from about 1.6 to about 10.0 centipoises at 25 °C; (2) an electrical resistivity from about 50 to about 2000 ohm-cm; and (3) a sonic velocity from about 1100 to about 1700 meters/second.
- 4-7. (Canceled)
8. (Currently Amended) The jet ink composition of ~~claim 7~~ claim 2, wherein the rosin ester resin is a hydrogenated rosin ester resin.
9. (Original) The jet ink composition of claim 8, wherein the hydrogenated rosin ester resin is a glycerol modified hydrogenated rosin ester resin.
- 10-11. (Canceled)
12. (Previously Presented) The jet ink composition of claim 2, wherein the colorant is a dye, pigment, lake, or a combination thereof.
13. (Original) The jet ink composition of claim 12, wherein the colorant is a dye.

Application No. 10/775,979

Reply to Office Action

14. (Previously Presented) The jet ink composition of claim 2, further comprising a plasticizer.
15. (Previously Presented) The jet ink composition of claim 2, further comprising a wetting agent.
16. (Previously Presented) The jet ink composition of claim 2, further comprising a defoamer.
17. (Currently Amended) The jet ink composition of claim 2, wherein the solvent is present in an amount of from about 70% to about 90% by weight of the composition, the rosin ester resin is present in an amount of from about 1% to about 20% by weight of the composition, the vinyl resin is present in an amount of from about 2% to about 10% by weight of the composition, and the colorant is present in an amount of from about 2% to about 15% by weight of the composition.
18. (Canceled)
19. (Original) The jet ink composition of claim 17, further comprising a wetting agent in an amount of from about 0.1% to about 1% by weight of the composition.
20. (Original) The jet ink composition of claim 17, further comprising a plasticizer in an amount of from about 0.1% to 2% by weight of the composition.
21. (Original) The jet ink composition of claim 17, further comprising a defoamer in an amount of from 0.5% to about 1.5% by weight of the composition.
22. (Previously Presented) A method for printing messages having adhesion on a low surface energy substrate comprising projecting a stream of droplets of the jet ink composition of claim 2, to the substrate, controlling the direction of the stream so that the droplets are caused to form the desired printed messages, and allowing the messages to dry.
23. (Original) The method of claim 22, wherein the low surface energy substrate is a plastic.

Application No. 10/775,979

Reply to Office Action

24. (Original) The method of claim 23, wherein the plastic is a polyolefin or a halogenated polyolefin.
25. (Original) The method of claim 24, wherein the polyolefin is polypropylene.
26. (Original) The method of claim 25, wherein the polypropylene is mono- or bi-axially oriented polypropylene.
27. (Original) The method of claim 22, wherein the low surface energy substrate is an oil-contaminated metal.
28. (Currently Amended) A jet ink composition comprising methyl ethyl ketone and/or acetone as solvent, a rosin ester resin, a vinyl resin, a cellulosic resin, and a colorant, ~~wherein the jet ink composition is free of an epoxy resin.~~
29. (Previously Presented) The jet ink composition of claim 28, which is also free of cellulose nitrate and free or substantially free of slow evaporating solvents, wherein the slow evaporating solvents have an evaporation rate of less than about 0.5 where n-butyl acetate has an evaporation rate of 1.0.
30. (Previously Presented) A method for printing messages having adhesion on a low surface energy substrate comprising projecting a stream of droplets of the jet ink composition of claim 28, to the substrate, controlling the direction of the stream so that the droplets are caused to form the desired printed messages, and allowing the messages to dry.